

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A method of racemizing N-carbamoyl amino acids, comprising:

contacting an N-carbamoyl amino acid with an effective amount of an N-acetyl amino acid racemase (AAR) from *Amycolatopsis orientalis* subspecies *lurida*.

2. (Original) The method of Claim 1, which is conducted in an enzyme-membrane reactor.

3. (Original) The method of Claim 1, wherein the N-acetyl amino acid racemase has the amino acid sequence shown in SEQ ID NO: 2.

4. (Original) The method of Claim 1, wherein the N-carbamoyl amino acid is an N-carbamoyl  $\alpha$ -amino acid.

5. (Previously Presented) The method of Claim 1, wherein the N-carbamoyl amino acid is a natural N-carbamoyl amino acid.

6. (Previously Presented) The method of Claim 1, wherein the N-carbamoyl amino acid is an unnatural N-carbamoyl amino acid.

7. (Original) The method of Claim 1, further comprising treating the racemized N-carbamoyl amino acid with a carbamoylase.

8. (Previously Presented) A method of producing enantiomerically enriched amino acids, comprising:

contacting an N-carbamoyl amino acid with an effective amount of an N-acetyl amino acid racemase (AAR) from *Amycolatopsis orientalis* subspecies *lurida*, and

contacting the racemized N-carbamoyl amino acid with a carbamoylase.

9. (Original) The method of Claim 8, which is conducted in an enzyme-membrane reactor.

10. (Original) The method of Claim 8, wherein the N-acetyl amino acid racemase has the amino acid sequence shown in SEQ ID NO: 2.

11. (Original) The method of Claim 8, wherein the N-carbamoyl amino acid is an N-carbamoyl  $\alpha$ -amino acid.

12. (Previously Presented) The method of Claim 8, wherein the N-carbamoyl amino acid is a natural N-carbamoyl amino acid.

13. (Previously Presented) The method of Claim 8, wherein the N-carbamoyl amino acid is an unnatural N-carbamoyl amino acid.

14. (Currently Amended) A method of producing enantiomerically enriched amino acids, comprising:

contacting an hydantoin with a hydantoinase to produce the corresponding N-carbamoyl amino acid,

contacting an N-carbamoyl amino acid with an effective amount of an N-acetyl amino acid racemase (AAR) from *Amycolatopsis orientalis* subspecies lurida to produce a racemized N-carbamoyl amino acid, and

contacting the racemized N-carbamoyl amino acid with a carbamoylase to produce the corresponding amino acid.

15. (Original) The method of Claim 14, which is conducted in an enzyme-membrane reactor.

16. (Original) The method of Claim 14, wherein the N-acetyl amino acid racemase has the amino acid sequence shown in SEQ ID NO: 2.

17. (Original) The method of Claim 14, wherein the N-carbamoyl amino acid is an N-carbamoyl  $\alpha$ -amino acid.

18. (Previously Presented) The method of Claim 14, wherein the N-carbamoyl amino acid is a natural N-carbamoyl amino acid.

19. (Previously Presented) The method of Claim 14, wherein the N-carbamoyl amino acid is an unnatural N-carbamoyl amino acid.